THE MINISTER OF STEEL AND MINES (SHRI MAKHAN LAL FOTEDAR): (a) and (b) In respect of items like Pig Iron, Hot Rolled Coils/Sheets and Cold Rolled Coils/ Sheets, there is a gap between supply and domestic demand. This is because the indigenous production has not yet caught up with the demand in the country.

(c) During the year 1988-89, a scheme was introduced under which SAIL is supplying imported Hot Rolled Coils and Pig Iron on' no profit no loss' basis to meet the demand of consumers.

(d) Does not arise.

Iron ore Mines in Orissa

2737. SHRI JAGADISH JANI: Will the Minister of STEEL AND MINES be pleased to state:

(a) whether there is a need to develop the iron-ore mines in Orissa;

(b) if so, the steps taken by Government in this regard;

(c) whether any new system is proposed to be adopted for the development of iron-ore mines in that State and

(d) if so, the details thereof?

THE MINISTER OF STEEL AND MINES (SHRI MAKHAN LAL FOTEDAR): (a) and (b) Development of iron ore mines in Orissa is directly linked to orders for export of iron ore through Paradip Port. Exports through Paradip have declined mainly due to inadequate port facilities. Studies have already been taken up for improving these port facilities and also for improvement of complementary infra-structure facilities.

(c) No, Sir

(d) Does not arise.

Implementation of Research and Development Projects

2738. SHRI JAGADISH JANI: Will the Minister of STEEL AND MINES be pleased to state:

(a) whether Steel Authority of India is laying emphasis on the implementation of Research and Development projects;

(b) if so, how many Research and Development projects have been completed by SAIL so far;

(c) how many projects have been implemented in the steel plants by the Research and Development wing of SAIL and

(d) the details of all these projects undertaken by the Research and Development wing of SAIL during the last three years?

THE MINISTER OF STEEL AND MINES (SHRI MAKHAN LAL FOTEDAR): (a) Yes, Sir.

(b) Research and Development Centre of SAIL has completed 363 projects till 1-1-89.

(c) So for 105 projects have been implemented in the SAIL plants.

(d) Details of some of the important projects implemented/under implementation are as follows:—

(i) Introduction of Group wise crushing of coal at Bokaro Steel Plant has resulted in higher coke strength.

(ii) By reducing the oversize percentage of coke being charged in the Blast Furnace at Bhilai Steel Plant, there has been increase in productivity and decline in coke rate.

(iii) Introduction of Air injection technique in Open hearth furnaces at IISCO, Burnpur has resulted in increased yield of steel.

(iv) Introduction of SAIL combined blowing technology at Bokaro